

Paolo Piras

Researcher on H2 technologies

Experience

○ Researcher Engineer in Hydrogen technology and systems

Fondazione Bruno Kessler Feb. 2024 - current

The main activities carried out focused on:

- Participate in engineering activities on sizing and choice process for equipment and components, developing PFDs and P&IDs for novel H2 systems.
- Support on Safety and Risk Analysis (es. HAZID, HAZOP, ATEX).
- Techno Economic Assessment on H2 sector, technologies and scenarios.
- Support on the definition of infrastructure scheme of novel facility, through continuous confrontation of supplier and contractors from planning/design to procurement.
- Definition of requirements and specification of equipment for the testing and characterization system and component for H2 sector.
- Support and collaborate with the H2 team for equipment supply and preparation of requirements.
- Follow the development of prototypes and demos, including commissioning and FAT.
- Produce reports, deliverables, and technical reviews of European and Commercial projects.
- Engineering review and support of commercial projects.

○ Internship O&M Hydrogen-Strategy & Growth

Enel Green Power SPA Feb. 2023 - Aug. 2023

The main activities carried out focused on:

- definition of readiness and related KPIs to monitor the performance of new plants
- digitization of plant and operational data
- integration of tools to ensure a consistent approach to O&M activities, in accordance with what is also done by other renewable technologies
- continuous and constant interaction with project developers and other more mature renewable technologies (wind and solar)
- growth activities, supporting the country's O&M units in the initial stages of operation

Education

○ Bachelor's degree in Energy Engineering

Politecnico di Milano sept. 2016 - sept. 2020

○ Master's degree in Energy Engineering (Energy for development)

Politecnico di Milano sept. 2020 - april 2024

Activities and Projects

○ Conference Paper

"Investigating the economic and environmental impacts of a technological shift towards hydrogen-based solutions for steel manufacture in high-renewable electricity mix scenarios for Italy"

Presented at 7th AIGE/IIETA International Conference and 16th AIGE Conference on: Energy Conversion, Management, Recovery, Saving, Storage and Renewable Systems (AIGE 2022)

○ Thesis

"Hydrogen production from renewable energy: comparison of integrated P2G systems through optimization"